CLAIMS

What is claimed is:

1. A computer-readable medium having computer-executable instructions for performing steps for retrieving data from a database having a plurality of objects, comprising:

receiving a database access request containing a location path expression identifying a data path to desired data in the database, the location path expression including a view name specifying a data view associated with a predefined relationship between object attributes in the database and a plurality of path elements denoting nodes in the data path to the desired data; and

performing database access operations to traverse the nodes in the data path based on the predefined relationship to locate the desired data.

2. A computer-readable medium as in claim 1, having further computer-executable instructions for performing the step of reviewing configuration information to identify the predefined relationship associated with the view name in the location path expression.

3. A computer-readable medium as in claim 2, wherein the step of reviewing configuration information further identifies a root level starting point associated with the view name.

4. A computer-readable medium as in claim 2, wherein the step of reviewing the configuration determines whether the client has permission to access the database based on the predefined relationship.

5. A computer-readable medium as in claim 1, wherein the step of performing database access operations includes generating a plurality of data queries for sequentially locating objects corresponding to the path elements in the location path expression, and sending the data queries to a database server of the database.

6. A computer-readable medium as in claim 5, wherein the data queries are according to the Lightweight Directory Access Protocol (LDAP).

7. A computer-readable medium as in claim 5, wherein the step of receiving receives the database access request in a message according to the Simple Object Access Protocol (SOAP).

8. A computer-readable medium as in claim 1, wherein one of the path elements of the location path expression is a wildcard element.

9. A computer-readable medium as in claim 1, wherein one of the path elements of the location path expression indicates a search in a reversed direction of the predefined relationship.

10. A computer-readable medium as in claim 1, wherein the predefined relationship is defined between attributes of two objects of a same class.

11. A computer-readable medium as in claim 10, wherein the predefined relationship is defined between attributes of two objects of different classes.

12. A computer-readable medium as in claim 1, wherein the database is a directory service database.

13. A computer-readable medium having computer-executable instructions for a client to perform steps to access data located in a database having a plurality of objects, comprising:

forming a request containing a location path expression identifying a data path to desired data, the location path expression including a view name specifying a data view associated with a predefined relationship between object attributes in the database and a plurality of path elements denoting nodes in the data path to the desired data; and

sending the request to a server for accessing the database.

14. A computer-readable medium as in claim 13, having further computer-executable instructions for performing the step of obtaining configuration information from the server defining relationships among attributes of objects in the database and associated view names thereof.

15. A computer-readable medium as in claim 14, wherein the step of sending sends the request in a message to the server according to the Simple Object Access Protocol (SOAP).

16. A computer-readable medium as in claim 13, wherein one of the path elements of the location path expression is a wildcard element.

17. A computer-readable medium having computer-executable instructions for a database server of a database containing a plurality of objects to perform steps to respond to database access requests, comprising:

receiving a database access request from a client, the database access request containing a location path expression identifying a data path to desired data, the location path expression including a view name specifying a data view associated with a predefined relationship between object attributes in the database and a plurality of path elements denoting nodes in the data path to the desired data; and

performing data retrieval operations to traverse the nodes in the data path based on the predefined relationship to locate the desired data.

18. A computer-readable medium as in claim 17, having further computer-executable instructions for performing the step of reviewing configuration information to identify the predefined relationship associated with the view name in the location path expression.

19. A computer-readable medium as in claim 18, wherein the step of reviewing configuration information further identifies a root level starting point associated with the view name.

20. A computer-readable medium as in claim 18, wherein the step of reviewing the configuration determines whether the client has permission to access the database based on the predefined relationship.

21. A computer-readable medium as in claim 17, wherein the database is a directory service database.

22. A method for a client to obtain data from a database containing a plurality of objects, comprising:

constructing, by the client, a database access request containing a location path expression identifying a data path to desired data, the location path expression including a view name associated with a predefined relationship between object attributes in the database and a plurality of path elements denoting nodes in the data path to the desired data;

sending, by the client, the database access request to a server for accessing the database;

performing, by the server, database access operations to traverse the nodes in the data path based on the predefined relationship to locate the desired data; and

returning, by the server, the located desired data to the client.

23. A method as in claim 22, further including the step of reviewing, by the server, configuration information to identify the predefined relationship associated with the view name of the location path expression.

24. A method as in claim 22, wherein the step of performing database operations by the server includes generating a plurality of data queries to locate objects corresponding to the path elements in the location path expression, and sending the data queries to a database server of the database.

25. A method as in claim 24, wherein the step of sending by the client sends the database access request in a message to the server according to the Simple Object Access Protocol (SOAP).

26. A database system for providing data in response to requests from clients, comprising:

a database containing a plurality of objects;

a server for accessing data in the database, the server being programmed for receiving a database access request from a client containing a location path expression identifying a data path to desired data, the location path expression including a view name associated with a predefined relationship between object attributes in the database and a plurality of path elements denoting nodes in the data path to the desired data, the server being further programmed for performing database access operations to traverse the nodes in the data path based on the predefined relationship to locate the desired data and returning the located desired data to the client.

27. A database system as in claim 26, wherein the server contains configuration information identifying the predefined relationship associated with the view name of the location path expression.

28. A database system as in claim 26, further including a database server for the database, and wherein the server performs the database access operations by generating a

plurality of data queries to locate objects corresponding to the path elements in the location path expression, and sending the data queries to the database server.

29. A database system as in claim 26, wherein the server is a database server of the database.

30. A database system as in claim 26, wherein the database is a directory service database.